CONSERVATION PLAN

June 25, 2002

ILLINOIS CHORUS FROG *(Pseudacris streckeri illinoensis)*

POTENTIAL IMPACTS
from FAP 310, (US 67), BEARDSTOWN, ILLINOIS
by the Illinois Department of Transportation

BACKGROUND

The Illinois Department of Transportation (IDOT) proposes to construct a 4-lane, partial access controlled, divided expressway, which would be approximately 90 kilometers (56 miles) in length. The project would extend from Jacksonville Bypass on the south to U.S. 136 on the north. The project study area is located within four counties, Morgan, Cass, Schuyler, and McDonough, and encompasses a number of communities. The proposed project would be designated as Federal Aid Primary Route (FAP 310) and marked as U.S. 67.

Biological surveys performed during the project development phase indicated that a state-listed species, the Illinois chorus frog (*Pseudacris streckeri illinoensis*) was present in the sandy soil habitats found within the project area. These habitat areas are located along the Preferred Alignment between Beardstown and Honey Point Road (Figure 2-1 & Exhibits 7, 8, 9, 11).

Through coordination with the Illinois Department of Natural Resources (IDNR) it has been determined that construction of the road project could result in the killing or injuring (incidental taking) of an undetermined number of Illinois chorus frogs in the Beardstown area and in other areas south. This Conservation Plan (CP) describes the Illinois chorus frog, the potential impacts caused by the project, measures taken to minimize harm to this species, proposed mitigation, and alternatives considered. This document also includes an implementation agreement.

BIOLOGICAL DESCRIPTION

The Illinois chorus frog is a State-listed threatened species that is known to occur in nine counties in Illinois, in sandy habitats along the central part of the Illinois Waterway, and only along its eastern side. It breeds in early spring, in shallow, fishless ponds/pools that hold water through June when the transforming froglets leave their natal ponds. The spent adults and froglets then migrate to suitable habitat to spend the remainder of the year. They are highly fossorial and migrate to preferred areas of sandy soil with sparse vegetation or absence of vegetation. They require substrates with poor to very poor sod development to accommodate their fossorial habits. The post-breeding activity is subterranean, with frogs seldom or never coming to the surface during non-breeding

seasons. This frog species has two main requirements: sand substrates for burrowing during non-breeding seasons, and ephemeral, fishless bodies of water that persist long enough to allow for breeding and transformation of at least some of the froglets. Because most of these habitats have been converted to agriculture or developed for other human activities, Illinois chorus frogs are now uncommon.

IDOT's TAKING ACTIVITIES OF THE ILLINOIS CHORUS FROG

IDOT will be changing the current state and condition of the areas where the chorus frogs are thought to occur with construction of the new highway. This activity will involve fill for a new highway and approach ramps to a new bridge structure over the Illinois River as well as excavation for drainage ditches. These activities have the potential to result in "incidental takings" of Illinois chorus frogs during the non-breeding part of the frog's life cycle. First, some Illinois chorus frogs utilizing the area could be buried and killed while placing fill for the highway and approach ramps. Secondly, burrowed frogs utilizing the area for the non-breeding part of their life cycle could be exposed or uncovered when the area is excavated for drainage ditches. This has the potential to cause some mortality (incidental taking) to those frogs that didn't escape the excavation and removal process.

QUANTIFICATION OF TAKE

There are five areas of potential impact to the Illinois Chorus Frog. The number of frogs currently utilizing the areas is unknown. IDOT will initiate further studies in the Spring of 2003. The monitoring efforts should help to estimate usage both for breeding and non-breeding portion of this species life cycle.

EFFORTS TO MINIMIZE HARM

Measures will be taken during the design phase to minimize the impacts to chorus frogs where the species are known to occur. The minimum safety standards will be implemented which includes reducing the median width from 15 meters to 7 meters thereby reducing state right-of-way acquisition and construction limits. The horizontal curvature of the expressway design near the Beardstown Marsh will be reduced to the minimum safety requirement. These efforts will decrease the footprint and fill for the highway thus reducing potential impacts to the chorus frog habitat.

COMPENSATION MEASURES

The scheduled construction for the US 67 Expressway between Jacksonville and Macomb will be divided into several contracts. The contract for the highway construction in the Beardstown area is currently not budgeted in the 5 year program. Anticipated funding for mitigation and monitoring efforts including land acquisition for this CP will be targeted in 2003. IDOT stands committed to the effort of implementing funding for mitigation efforts outlined in this CP. Actual construction of the highway in this area may not be realized for several years, however, mitigation efforts will occur as soon as reasonably achievable. The intent for this CP will be to increase and preserve the chorus frog habitat prior to impacts actually occurring, thereby, increasing the number of chorus frogs and ensuring their survival.

The United States Army Corps of Engineers (ACOE) have plans in place for monitoring Illinois chorus frog usage at nearby dredge placement sites located within close proximity of the US 67 Expressway project. The ACOE has agreed to provide these studies to IDOT for educational and research purposes to assist with the mitigation efforts proposed in this CP. IDOT will initiate further studies in the Spring of 2003 and provide the information to IDNR. A cooperative effort between all the agencies will ensure the future existence and enhancement of this species in the Beardstown Area.

IDOT will purchase property that contains suitable habitat for the chorus frog. The land acquisition is anticipated in 2003. The 7.6 acre parcel is located between the proposed interchange and bridge structure carrying US 67 over the Illinois River. This property is immediately adjacent to the ACOE dredge placement site described above (Figure 1). Upon acquisition, a transfer agreement will be established which will assign the IDNR with management responsibilities to insure preservation and protection of the site in perpetuity. Under the transfer agreement, a management and monitoring plan will be developed and administered by Natural Heritage Biologists with IDNR that have the knowledge and expertise capable of conducting projects of this magnitude. Management techniques may include periodic prescribed burning and prairie planting to encourage native plant vigor, herbicide use to eliminate woody encroachment, and management activities to maintain the integrity of the site. Monitoring will be performed every Spring for the entire site for a period of five years by IDOT. The preservation of this parcel will expand the ACOE mitigation site and correlate with its mitigation plan for conservation that has already been coordinated and developed through IDNR. These additional mitigation efforts will exceed the incidental taking of Illinois chorus frogs that are associated with the US 67 Expressway project.

DESCRIPTION OF PARCEL

The 7.6 acre parcel to be acquired by IDOT and transferred to IDNR, consists of Dickinson Fine sandy Loam, Medway loam and Worthen silt loam (Soil Survey). Most of the land is in agriculture production, however, there is a portion of the parcel that contains forested wetland habitat. In 1997, studies conducted by the Illinois Natural History Survey for the US 67 Expressway identified chorus frogs in the areas immediately adjacent to this parcel. These studies noted that the chorus frog is likely to be found in any sandy soils that are at least seasonally inundated, including agricultural fields, from Beardstown south to the Cass-Morgan county line. The natural characteristics of the parcel to be acquired are favorable for chorus frog habitat.

State ownership of the highway right-of-way should contribute to the continued use by Illinois chorus frogs in the non-roadway areas. Agricultural practices can damage chorus frogs from pesticide and herbicide use, and cause mortality from machinery employed in farming practices. State ownership in fee title would ensure that land-use will be long-term for preservation purposes, thereby potentially decreasing mortality from farming activities. With the absence of farming, native characteristics of the sand prairie will begin to develop and revert back to pre-settlement conditions when the chorus frogs were not disturbed by human activity.

ALTERNATIVES CONSIDERED

No Action. The No Build Alternative is defined as no new major construction. Improvements implemented under this alternative would be limited to short-term restoration activities (maintenance improvements) needed to ensure continued use of U.S. 67 between Jacksonville and Macomb. There would be no need for additional right-of-way for the No-Build Alternative. This alternative does not meet the purpose and need.

Alignment A Alternative. The original scope of study for the US 67 Expressway project consisted of an alternative route deemed Alignment A. Alignment A was located to the east of Arenzville-Concord Road and would have required a new four-lane facility between Chapin and Beardstown. This Alignment was evaluated and dismissed because of greater impacts to natural resources, including the Illinois chorus frog and other Illinois Threatened and Endangered Species.

Alignment E Alternative. This is the preferred alternative. This alternative follows existing U.S. 67 between Jacksonville and Macomb.

Altering Design Alternatives. Highway design modifications in the habitat areas of the Illinois chorus frogs were evaluated to try to avoid the impacts. Many were dismissed due to compromising safety standards and greater impacts to sensitive habitats. However, measures were taken to reduce impacts such as using the minimum safety standards for median widths (7 meters rather than 15 meters) and utilizing the minimum horizontal curvature for the expressway design in these areas.

SUMMARY

The Illinois Department of Transportation agrees to acquire a parcel of land adjacent to the proposed right of way for the US 67 interchange and approach ramps for the structure over the Illinois River near Beardstown. The 7.6 acre parcel is known to contain suitable habitat and breeding sites for the Illinois chorus frog and will compliment the Army Corps of Engineers' current frog mitigation site. Preserving and protecting this land will compensate for the potential impacts to the Illinois chorus frog that may occur due to the construction of the U.S. Route 67 Expressway. Upon acquisition, a transfer agreement will be established which will assign the Illinois Department of Natural Resources with management, development, and maintenance responsibilities to insure preservation and protection of the site in perpetuity. After acquisition, IDOT will monitor the site every Spring for five years to verify chorus frogs are present. The IDNR agrees to accept this Conservation Plan and establish a final concurrence thus absolving IDOT of any further mitigation efforts for the Illinois chorus frog.

IMPLEMENTING AGREEMENT

Victor A. Modeer, Jr. Illinois Department of Transportation – District Engineer for IDOT District 6 office will endorse the Final Conservation Plan approved by IDNR.

Dennis M. O'Connell, Illinois Department of Transportation – District 6, Environmental Studies Section, is the author of this CP and will be the primary contact.

Steve Hamer, Illinois Department of Natural Resources Transportation Review Program, is the liaison between IDOT and IDNR.

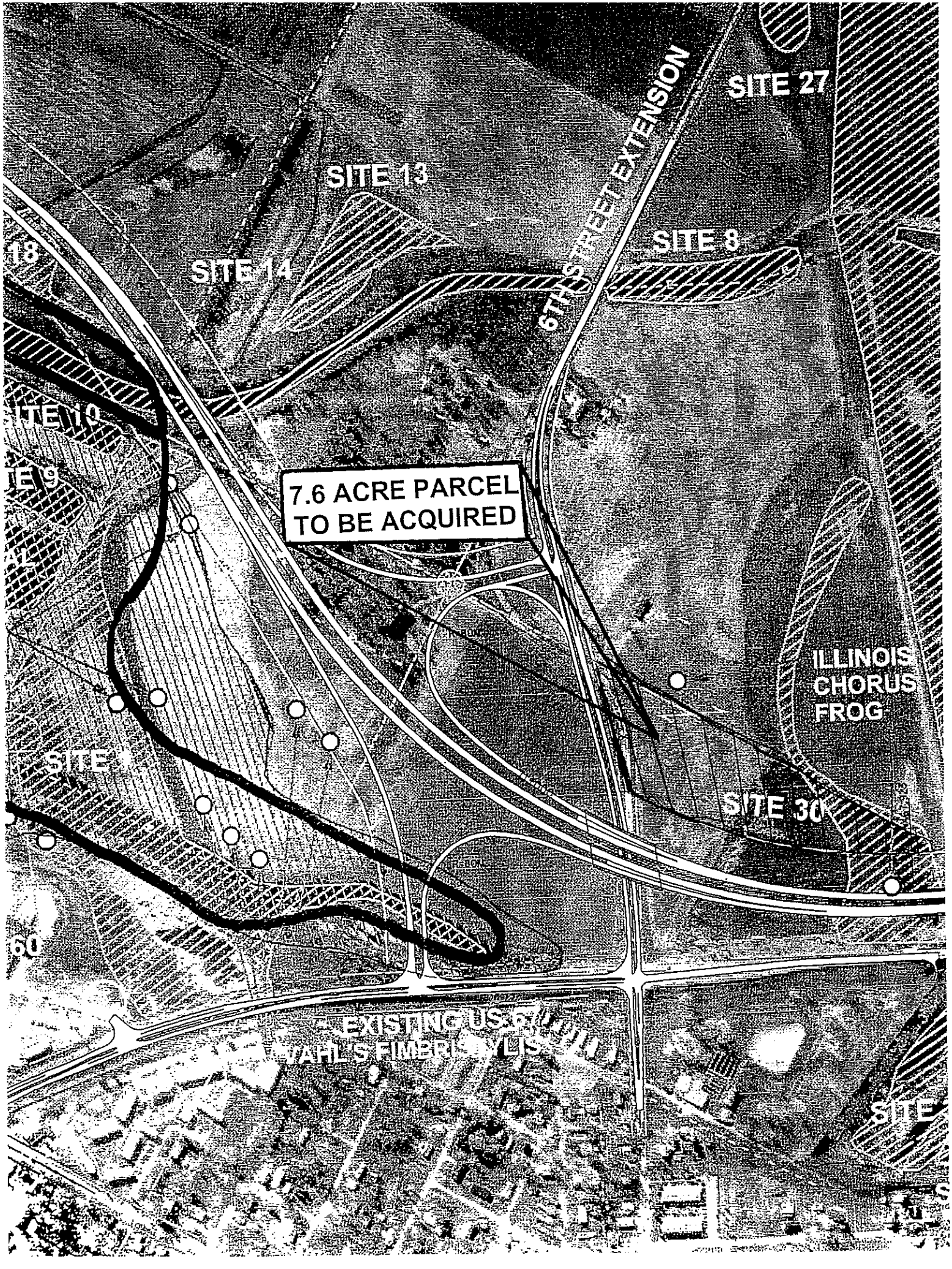
Chris Phillips, Illinois Natural History Survey, will be the Principal Investigator for the monitoring mentioned in this CP and will be responsible for writing/issuing an annual report to the District on 1 August of each project year.

Glen Kruse and Joe A. Kath, Program Manager and Project Manager, respectively, Office of Resource Conservation, Illinois Department of Natural Resources are responsible for critically reviewing this CP. They are responsible for issuance of the Illinois Department of Natural Resources Incidental Take Authorization.

LIST OF FIGURES

FIGURE 1 - Parcel of land proposed for Land Acquisition
FIGURE 2-1 Location Map
EXHIBIT 7 – Location of Chorus Frog impact
EXHIBIT 8 – Location of Chorus Frog impact
EXHIBIT 9 – Location of Chorus Frog impact
EXHIBIT 11– Location of Chorus Frog impact
SOIL SURVEY REPORT

FIGURE 1


SITE 27
SITE 13
6TH STREET EXTENSION
SITE 8
SITE 14
7.6 ACRE PARCEL
TO BE ACQUIRED
ILLINOIS
CHORUS
FROG
SITE 30
EXISTING US 6

NOTICE

The Illinois Department of Transportation (IDOT), District 6 office, has applied for Incidental Take Authorization to the Illinois Department of Natural Resources, Office of Resource Conservation, concerning an Illinois threatened frog species, the Illinois Chorus Frog *(Psuedacris streckeri illinoensis).* The District 6 mailing address is:

ATTN: Victor A. Modeer, Jr.
Illinois Department of Transportation
126 East Ash
Springfield, IL 62704

The accompanying map shows the sites that, through the construction of the US 67 Expressway project, may impact the Illinois Chorus Frog.

The construction activities for the highway that have the potential to take some undetermined number of Illinois Chorus Frogs include placing fill over known habitat areas and excavating for drainage ditches. The placement of fill has the potential to bury and kill frogs. Excavation for drainage ditches may uncover or expose the frogs during non breeding times when they are burrowed into the ground. These activities may cause mortality (incidental taking) to the frogs that inhabit those areas of construction.

Since these burrowing frogs can only be found in areas of unconsolidated sand, areas that have this type of criteria and that currently contain species of Illinois Chorus Frogs are being sought and protected by the use of Conservation Easements and special management techniques. IDOT is proposing to acquire land and establish a transfer agreement to the Illinois Department of Natural Resources to protect these species at a nearby site known to contain chorus frogs. The proposed management activities associated with the transfer agreement will include seizing farming activities, periodic prescribed burning to encourage native plant vigor, herbicide use to eliminate woody encroachment onto the prairie areas, and management activities to maintain the integrity of the habitat that already exist. These special management projects will afford the frogs the protection they need for their continual existence. As a result, the existing populations will thrive and the survival of the Illinois Chorus Frog in the Beardstown area will be enhanced.

The IDOT has written a Conservation Plan outlining measures to compensate any potential taking of the Chorus Frogs back to a population level prior to the construction project. A copy of the Conservation Plan can be found at the Beardstown Public Library and at the Illinois Department of Natural Resources regional office in Alton at 4521 Alton Commerce Parkway, Alton, Illinois 62002 (ATTN: Todd Strole).

Comments to this proposal should be directed to the Illinois Department of Natural Resources, Division of Natural Heritage, 524 South Second Street, Springfield Illinois 62701-1787, or e-mail to endspec@dnrmail.state.il.us.

The comment period closes 30 days after the final publication of this notice that first appears in the Cass County Star Gazette on ? 2002. The final publication is scheduled for ? 2002, making the closing date for comments at the close of business ? 2002.

FIGURE 2-1

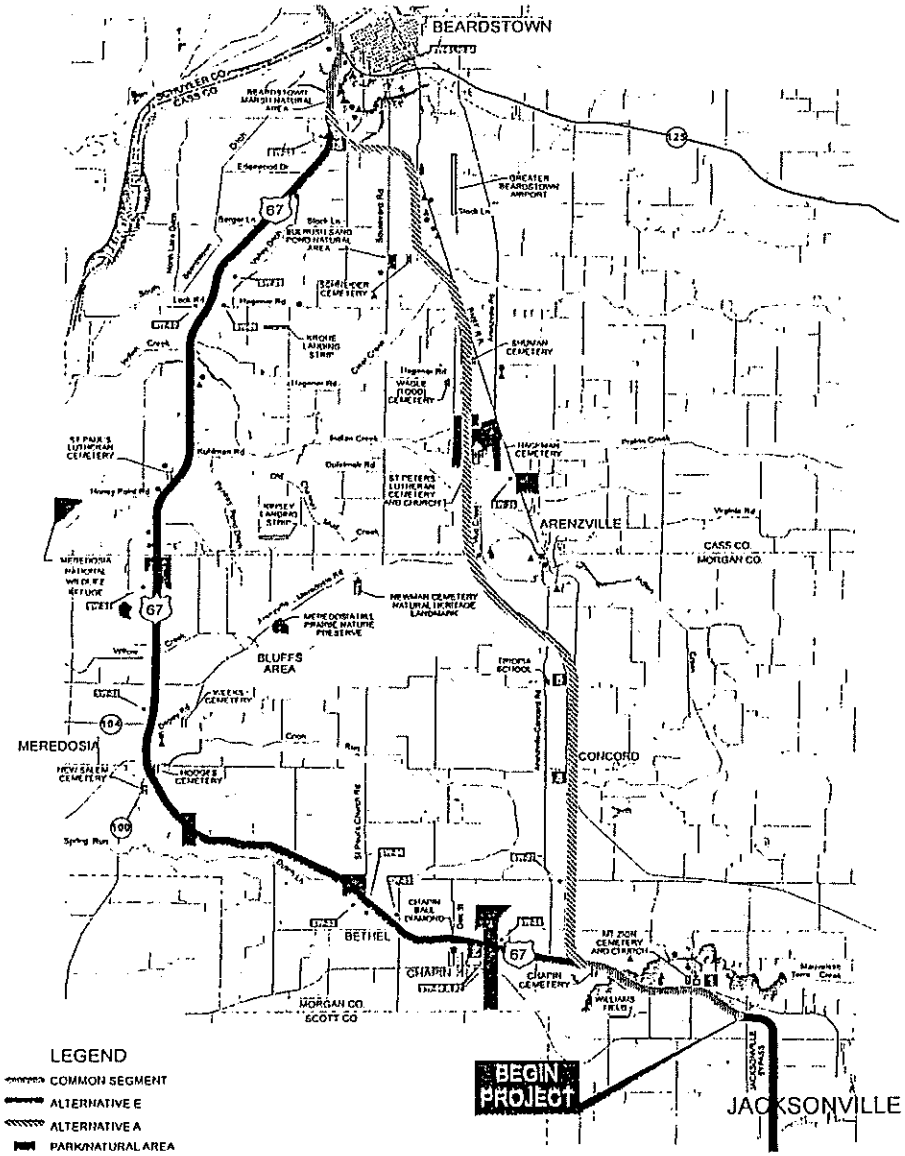


Figure 2-1
Environmental Inventory Map
South of Illinois River
CH2MHILL
Figure 1 of 3